

J.D. BIRLA INSTITUTE
School of Food Science & Nutrition Management
Four Year (8-Semester) B.Sc. (Hons.) in Food & Nutritional Sciences with Minor in
Institutional Management AND Health & Wellness/ Sustainable Fashion/ Retail & Brand
Management / Sustainable Practices & Heritage Management/ Disability Studies
With Specialization in
Clinical Nutrition & Dietetics (A)/ Food Science & Quality Control (B)
CURRICULUM UNDER NEP
(Applicable from Session 2026-2027)

Subject Code	Course Nomenclature	Details	Credits
SEMESTER-I			
FNS101	DSC	Introduction to Food & Nutrition	4
FNS102	DSC	Fundamentals of Food Preparation	2
FNS103	MINOR	Principles of Management	4
FNS104	IDC	Computer Theory & Applications	3
FNS105	AEC	Communication Skills & Personality Development	2
FNS106	SEC	Life Skills in Nutrition	3
FNS107	VAC	Emotional Intelligence	4
Total			22
SEMESTER-II			
FNS201	DSC	Nutrition Through Life Cycle	4
FNS202	DSC	Human Physiology	4
FNS203	DSC	Human Physiology	2
FNS204	MINOR	Hospitality Services	4
FNS205	AEC	Critical & Design Thinking	2
FNS206	SEC	Fundamentals of Bakery & Confectionary	3
FNS207	VAC	Indian Knowledge System	4
Total			23
SEMESTER-III			
FNS301	DSC	Food Science	4
FNS302	DSC	Food Components	4
FNS303	DSC	Family Meal Planning	2
FNS304	MINOR	Hospital Management	4
FNS305	IDC	Environmental Studies & Sustainability	3
FNS306	AEC	Creative Writing in Hindi OR Creative Writing in Bengali	2
FNS307	SEC	Food Service Management	3
Total			22
SEMESTER-IV			
FNS401	DSC	Dietetics I	4
FNS402	DSC	Food Science	2
FNS403	DSC	Dietetics I	2
FNS404	DSC	Nutritional Biochemistry	2
FNS405	DSC	Term Paper & Seminar	4
FNS406	MINOR	Healthcare Management	4
FNS407	IDC	Innovation & Entrepreneurship	3
FNS408	AEC	Academic Writing & Statistics	2
Total			23
SEMESTER-V			
FNS501	DSC	Dietetics II	4
FNS502	DSC	Nutritional Biochemistry	4
FNS503	DSC		4
	A	Pediatric Nutrition	
	B	Food Preservation	

FNS504	DSC		2
	A	Diet & Patient Counseling	
	B	Food Preservation	
FNS505	DSC	Dietetics II	2
FNS506	MINOR	Contemporary Lifestyle Studies/ MINOR 3	4
FNS507	-----	SUMMER INTERNSHIP (6-week)	2
Total			22
SEMESTER-VI			
FNS601	DSC	Food Microbiology	4
FNS602	DSC	Food Processing Operations	4
FNS603	DSC	Food Packaging	4
FNS604	DSC		4
	A	Advanced Therapeutic Nutrition	
	B	Food Quality Analysis	
FNS605	DSC		2
	A	Advanced Therapeutic Nutrition	
	B	Food Quality Analysis	
FNS606	DSC	Food Microbiology	2
FNS607	MINOR	Fundamentals of Beauty & Health / MINOR 3	4
Total			24
SEMESTER-VII			
FNS701	DSC	Public Health & Nutrition	4
FNS702	DSC	Nutraceuticals & Functional Food	4
FNS703	DSC		4
	A	Nutrigenomics	
	B	Food Safety & Food Standards	
FNS704	DSC		2
	A	Food Safety & Quality Analysis	
	B	Food Safety & Food Standards	
FNS705	DSC	Food Design & Product Development	2
FNS706	MINOR	Functional Fitness / MINOR 3	4
Total			20
SEMESTER-VIII			
FNS801	DSC	Geriatric Nutrition	4
FNS802	MINOR	Biological Foundation of Mental Wellbeing / MINOR 3	4
FNS803	Any one from I or II		
	I	DISSERTATION	12
	II		
	II1		4
	A	Sports Nutrition	
	B	Food Auditing	
	II2		4
	A	Nutrition in Emergency Situations	
	B	Food Toxicology	
	II3		4
	A	Nutrition for Specially Abled	
	B	Food Biotechnology	
Total			20
GRAND TOTAL			176
■ DSC: Discipline Specific Core ■ IDC: Inter-Disciplinary Course ■ AEC: Ability Enhancement Course ■ SEC: Skill Enhancement Course ■ VAC: Value Added Course			

Minor Courses Offered by B. Sc. (Hons.) in Food & Nutritional Sciences

MINOR-1: Institutional Management		
FNS103	Principles of Management	
FSN204	Hospitality Services	
FSN304	Hospital Management	
FSN406	Healthcare Management	
MINOR-2: Health & Wellness		
FSN506	Contemporary Lifestyle Studies	
FSN607	Fundamentals of Beauty & Health	
FSN706	Functional Fitness	
FSN802	Biological Foundation of Mental Wellbeing	
MINOR-3: Any one course from the list given below (offered from other Schools):		
1	Sustainable Fashion	School of FT
2	Retail & Brand Management	School of FT
3	Sustainable Practices & Heritage Management	School of ID
4	Disability Studies	School of APBS

Specialization in Clinical Nutrition & Dietetics (A)

FNS503:A	Pediatric Nutrition
FNS504:A	Diet & Patient Counseling
FSN604:A	Advanced Therapeutic Nutrition
FSN605:A	Advanced Therapeutic Nutrition
FSN703:A	Nutrigenomics
FSN704:A	Food Safety & Quality Analysis
FSN803II1:A	Sports Nutrition
FSN803II2:A	Nutrition in Emergency Situations
FSN803II3:A	Nutrition for Specially Abled

Specialization in Food Science & Quality Control (B)

FNS503:B	Food Preservation
FNS504:B	Food Preservation
FSN604:B	Food Quality Analysis
FSN605:B	Food Quality Analysis
FSN703:B	Food Safety & Food Standards
FSN704:B	Food Safety & Food Standards
FSN803II1:B	Food Auditing
FSN803II2:B	Food Toxicology
FSN803II3:B	Food Biotechnology

PROGRAM OUTCOMES (POs)

Graduates of B.Sc. (Hons.) in Food & Nutritional Sciences will be able to:

PO1: Foundational Domain Knowledge

Apply fundamental principles of food science, nutrition, biochemistry, microbiology, human physiology, and clinical nutrition to assess, manage, and solve problems related to food quality, food safety, dietary planning, disease prevention, and health promotion.

PO2: Critical Thinking & Problem Analysis

Identify, analyze, and interpret complex nutritional and food-related problems using scientific reasoning and evidence-based approaches.

PO3: Design/Development of Solutions

Design appropriate food, nutrition, and health interventions that meet societal needs, considering safety, cultural sensitivity, and sustainability.

PO4: Conduct Investigations of Complex Problems

Design and execute investigations in food and nutritional sciences, including laboratory experiments, dietary surveys, and clinical assessments, and critically analyze data to draw meaningful conclusions.

PO5: Usage of Modern Methods & Tools

Use contemporary laboratory techniques, statistical tools, dietary assessment software, and digital technologies relevant to food and nutrition sciences.

PO6: The Science & Society

Apply scientific knowledge responsibly to address public health challenges, food security issues, and community nutrition needs.

PO7: Environment & Sustainability

Promote sustainable food systems, resource conservation, waste management, and environmentally responsible food practices.

PO8: Ethics & Professional Responsibility

Demonstrate ethical conduct, professional integrity, and accountability in food and nutrition practice, research, and community engagement, while adhering to legal standards, regulatory frameworks, and respecting intellectual property rights.

PO9: Individual & Team Work

Work effectively both independently and as a collaborative member or leader of multidisciplinary teams in food, nutrition, and health settings to achieve shared objectives.

PO10: Communication

Prepare and deliver clear, evidence-based communication in food and nutrition through reports, publications, presentations, counseling, and digital tools for diverse audiences, including policymakers, healthcare professionals, and the public.

PO11: Project Management & Entrepreneurship

Apply project management principles and entrepreneurial skills to plan, execute, and evaluate food and nutrition-related initiatives or ventures.

PO12: Lifelong Learning

Recognize the importance of lifelong learning and continuously update knowledge and skills to adapt to global industry changes, emerging technologies, innovations and sustainable practices in food and nutritional sciences.

PROGRAM SPECIFIC OUTCOMES (PSOs)

On successful completion of B.Sc. (Hons.) in Food & Nutritional Sciences programme, students will be able to:

PSO1: Food Science, Nutrition and Quality Control

Apply principles of food science, food chemistry, microbiology, processing, preservation, and quality control to ensure food safety, regulatory compliance, product development, and maintenance of quality standards across the food supply chain.

PSO2: Clinical Nutrition Practices and Dietetics

Apply principles of nutrition, human physiology, medical nutrition therapy, and dietetics to assess nutritional status, plan therapeutic diets, manage disease conditions, and promote health and recovery in clinical and community settings.